

and when you consider eating disorders, there's going to be a strong overlap. I don't think it's necessarily a causative factor in every case."

She says a new theory suggesting that anorexia may be a biologic mechanism developed by women when they believe it is not a societally optimal time to reproduce might have some validity. "I don't think that's the whole story by any means, that [anorexia] is purely biological and society has no influence over it. But I think like most things, it's probably a combination of factors. There are so many biological consequences to starvation. It only makes sense that somewhere along the way we learn to use that to our advantage."

She says some of her patients progress through therapy relatively quickly, but others may take years. "Eating disorders are such a

chronic problem that if I have patients who are doing particularly well we might just leave things open-ended and I might only see them every 6 months or so. Other patients may be doing very badly and I may be seeing them several times a week."

There is no such thing as an average treatment time, Kostynuk says. "There are some people who don't have a very long history, who do extraordinarily well. There may be some patients who are really chronic, who may have a 20-year history. It's probably not realistic to think they're going to make a complete recovery so what we're trying to do at that point is to manage the illness and prevent as many complications as we can."

Most of her referrals are from female physicians, who tend to recognize eating disorders sooner than their male colleagues.

"Women are more likely to ask and patients are more willing to confide in them. Many male physicians can't believe that women are that obsessed with this issue."

A significant proportion of Kostynuk's patients are from privileged backgrounds. "I'm wondering if it's partly because they're coming from a better educated background and their parents are more likely to be recognizing problems earlier and doing something about it."

"I spoke with a GP recently who says he doesn't see many patients with eating disorders," Kostynuk adds. "That's a fallacy. He sees lots of patients who have eating disorders but he's not picking them up. GP's may have more eating-disorder patients in their practices than they realize. Unless they're looking for them and asking the right questions, they're going to go unnoticed."■

## Wasted resources a major problem for Argentinian health care system

Ronald Labonte

*In the last issue of CMAJ, Ronald Labonte discussed the cholera pandemic that swept through Latin America in 1991 and 1992. Here he takes a more specific look at the health care system in place in one Latin American country, Argentina, and the need to improve its public health infrastructure.*

**W**e do not lack the resources to deal with cholera," says Dr. Carlos Ferreyra, president of Argentina's public health association. "Our resources are being wasted in the wrong places."

*Ronald Labonte is a community health consultant in Toronto.*

That waste includes the \$3 billion a year that the health care system loses to "bureaucracies and comisiones," says Ferreyra, referring to the byzantine and unregulated networks of intermediaries that must be dealt with when doing health care business in Argentina. "That's over 30% of our budget that doesn't go into any health service at all."

Argentina's health system is a complex, three-tiered web that bears some resemblance to health care in the US and has all of that country's well-noted deficiencies in coverage, excess medicalization and unproductive costs. While not typical of all South American health care systems, the Argentinian

model poses the rather universal dilemma of whether resources should continue to go into treatment programs, or into primary health care and disease-prevention strategies.

Argentina's first health care tier is a public level managed by federal, provincial or municipal governments. It includes hospitals and community health centres, and provides most of the system's acute care beds.

The second tier, superficially resembling health maintenance organizations in the US, is referred to as the "social insurance" system. Funding is provided through a payroll tax, which the government transfers to more

than 300 independent agencies called *obras sociales* (social work). Many of these agencies are admin-

istered by trade unions and have become large bureaucracies whose primary task is to administer con-

tracts with private or public hospitals and health centres to provide services to agency members.

This second tier is the largest health care provider in Argentina, covering some 65% of the population. (As in the US, the poor and unemployed must avail themselves of less adequate and more strained first-tier public services.) Due to poor administration, however, there is very little cash for the second-tier system.

The workers putatively covered by the second tier end up using the first-tier public system, overtaxing that system's ability to care for those who have no second-tier coverage.

The third tier is the fully private system of hospitals and medical care that is provided on a prepaid insurance basis. Nominally the smallest of the three tiers, this level is economically the most profitable, with much of the profit derived from services provided

## Risk cholera poses for travellers low but precautions needed

If you travel to South America the risk posed by cholera is low unless you travel to more isolated areas that lack treated water. The general precautions against gastrointestinal infection prevail: ensure that drinking water is safe. When in doubt, drink bottled water. Avoid ice cubes. Don't eat raw vegetables or unpeeled fruit. Peel your own fruit and scrub it well in safe water. Never eat ceviche, a raw-fish dish. Ensure that all meats and vegetables are well cooked. Avoid food prepared in the streets or mar-

kets. Cholera is often transmitted by infected food handlers, so if you have doubts about the health of a cook or other restaurant staff, prepare your own meal or eat elsewhere.

Existing cholera vaccines are only 50% effective for a maximum of 3 to 6 months and are not recommended by the World Health Organization. New vaccines are being tested — researchers are taking advantage of the South American pandemic to test some — but they are not yet available for public use.

## PONSTAN\*

(Mefenamic Acid) Capsules  
THERAPEUTIC CLASSIFICATION  
Analgesic.

**INDICATIONS AND CLINICAL USES:** PONSTAN (mefenamic acid) is indicated for the relief of pain of moderate severity in conditions such as muscular aches and pains, dysmenorrhea, headaches and dental pain. **CONTRAINDICATIONS:** PONSTAN (mefenamic acid) should not be used in patients who have previously exhibited hypersensitivity to it. Mefenamic acid is contraindicated in patients with active ulceration or chronic inflammation of the upper or lower gastrointestinal tract. Ponstan should not be administered to patients who have previously experienced diarrhea as a result of taking the drug. Mefenamic acid should be avoided in patients with pre-existing renal disease. **WARNINGS:** In patients with a history of ulceration or chronic inflammation of the upper or lower gastrointestinal tract, PONSTAN (mefenamic acid) should be given under close supervision and only after consulting the Adverse Reactions Section. Certain patients who develop diarrhea may be unable to tolerate the drug because of recurrence of the symptoms on subsequent exposure. In these subjects, the drug should be promptly discontinued. **PRECAUTIONS:** If rash occurs, the drug should be promptly discontinued. A false-positive reaction for urinary bile, using the diazo tablet test, may result after mefenamic acid administration. If biliruria is suspected, other diagnostic procedures, such as the Harrison spot test, should be performed. In chronic animal toxicity studies PONSTAN (mefenamic acid) at 7 to 28 times the recommended human dose, caused minor microscopic renal papillary necrosis in rats, edema and blunting of the renal papilla in dogs, and renal papillary edema in monkeys. In normal human volunteers, BUN levels were slightly elevated following the prolonged administration of mefenamic acid at greater than therapeutic doses. Since mefenamic acid is eliminated primarily through the kidneys, it should not be administered to patients with significantly impaired renal function. As with other nonsteroidal anti-inflammatory drugs, borderline elevations of liver function tests may occur. Meaningful (3 times the upper limit of normal) elevations of SGPT or SGOT occurred in controlled clinical trials in less than 1% of patients. Severe hepatic reactions including jaundice and cases of fatal hepatitis, have been reported with other nonsteroidal anti-inflammatory drugs. Although such reactions are rare, if abnormal liver tests persist or worsen, if clinical signs and symptoms consistent with liver disease develop, or if systemic manifestations occur (eg. eosinophilia, rash, etc.), mefenamic acid should be discontinued. Mefenamic acid may prolong acetylsalicylic acid induced gastrointestinal bleeding. However, mefenamic acid itself appears to be less liable than acetylsalicylic acid to cause gastrointestinal bleeding. Mefenamic acid 500 mg and acetylsalicylic acid 650 mg four times a day both caused significant further lowering of the prothrombin concentration (mefenamic acid 3.48% and acetylsalicylic acid 2.75%) in patients in whom the concentration had been initially lowered by anticoagulant therapy. Caution, therefore, should be exercised in administering mefenamic acid to patients on anticoagulant therapy and should not be given when prothrombin concentrations are in the range of 10 to 20% normal. Careful monitoring of blood coagulation factors is recommended. It is recommended that estimations of hemoglobin and blood counts be carried out at regular intervals. Mefenamic acid should be used with caution in known asthmatics. **Use in pregnancy and in women of childbearing potential:** The safety of mefenamic acid on reproductive capacity and pregnancy has not been established. Thus, mefenamic acid should be used in women of childbearing potential and during pregnancy only when the potential benefits are expected to outweigh the potential risks. **Nursing mothers:** Trace amounts of mefenamic acid may be present in breast milk and transmitted to the nursing infant; thus mefenamic acid should not be taken by the nursing mother because of the effects of this class of drugs on the infant cardiovascular system. **Use in children:** Safety and effectiveness in children below the age of 14 have not been established. **ADVERSE REACTIONS:** The most frequently reported adverse reactions associated with the use of PONSTAN (mefenamic acid) involve the gastrointestinal tract. The following disturbances were reported in decreasing order of frequency: diarrhea (approximately 5% of patients), nausea with or without vomiting, other gastrointestinal symptoms and abdominal pain. The occurrence of the diarrhea is usually dose related. Other gastrointestinal reactions less frequently reported were anorexia, pyrosis, flatulence, and constipation. Gastrointestinal ulceration with or without hemorrhage has been reported. **Hematopoietic:** Cases of autoimmune hemolytic anemia have been associated with the continuous administration of Ponstan for 12 months or longer. Decreases in hematocrit have been noted in 2-5% of patients and primarily in those who have received prolonged therapy. Leukopenia, eosinophilia, thrombocytopenic purpura, agranulocytosis, pancytopenia and bone marrow hypoplasia have also been reported on occasion. **Nervous System:** Dizziness, drowsiness, blurred vision, insomnia, nervousness and headache have occurred. **Integumentary:** Urticaria, rash and facial edema have been reported. **Renal:** As with other nonsteroidal anti-inflammatory agents, renal failure, including papillary necrosis, have been reported. In elderly patients renal failure has occurred after taking mefenamic acid for 2-6 weeks. The renal damage may not be completely reversible. Hematuria and dysuria have also been reported with mefenamic acid. **Other:** Eye irritation, ear pain, perspiration, mild hepatic toxicity and increased need for insulin in a diabetic have been reported. There have been rare reports of palpitation dyspnea and reversible loss of color vision. **DRUG INTERACTION:** Protein-bound Drugs. Because PONSTAN (mefenamic acid) is highly protein bound, it could be displaced from binding sites by, or it could displace from binding sites, other protein-bound drugs such as oral anticoagulants, hydantoins, salicylates, sulfonamide and sulfonylureas. Patients receiving mefenamic acid with any of these drugs should be observed for adverse effects. Anticoagulants and Thrombolytic Agents. Mefenamic acid enhances the hypoprothrombinemic effect of warfarin, therefore, concurrent administration of the drugs should be avoided whenever possible. If the drugs must be used concurrently, prothrombin time should be determined frequently and anticoagulant dosage adjusted accordingly; the patient should be observed for adverse effects. In addition, the ulcerogenic potential of mefenamic acid and the effect of the drug on platelet function may further contribute to the hazard of concomitant therapy with any anticoagulant or thrombolytic agent (eg. streptokinase). **DOSAGE AND ADMINISTRATION:** Administration is by the oral route, preferably with food. The recommended regimen in acute pain for adults and children over 14 years of age is 500 mg as an initial dose followed by 250 mg every 6 hours as needed, usually not to exceed one week. For the treatment of primary dysmenorrhea, the recommended dosage is 500 mg as an initial dose followed by 250 mg every 6 hours, starting with the onset of bleeding and associated symptoms. Clinical studies indicate that effective treatment can be initiated with the start of menses and should not be necessary for more than 2 to 3 days. **AVAILABILITY:** PONSTAN (mefenamic acid) is available in No. 1 Cont-snap capsule with an ivory opaque body and an aqua blue opaque cap. Each available in bottles of 100 and 500. **REFERENCES:** 1. Gabka J. Ponstan dental study. Berlin July 9, 1974. 2. Budoff PW. Zomepirac sodium in the treatment of primary dysmenorrhea syndrome. *N Eng J Med* 307:714-719, 1982. 3. Powell R, Smith RP. Treatment of primary dysmenorrhea with an antiprostaglandin agent. (In) *Symposium on "The Role of Prostaglandins in Menstrual Disorders,"* Academy of Medicine, Toronto, Ontario, June 20, 1980, pp 29-37. 4. Rees MCP, Bernard AI et al. Effect of fenamates on prostaglandin E receptor binding. *The Lancet* 2:541-542, 1988. 5. Smith RP, Powell JR. The objective evaluation of dysmenorrhea therapy. *Am J Obstet Gynecol* 137(3):314-319, 1980. 6. Ponstan product monograph. IMS, CDTI, September 1991. Product Monograph available on request.

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under contract to the first and second tiers. It is this system of contracts — the *comisiones* and the bureaucracies it sustains — that wastes much of the country's health care resources.

The service contracts are developed by intermediaries (in effect, labour contractors) hired by the *obras sociales* to purchase hospital and medical services on their behalf. Apart from the commissions earned in this contract process, it is also alleged to be prone to corruption: excessively high price quotations, lower actual contract payments, kickbacks.

Quite apart from these "leakages" and the system's administrative inefficiencies, Argentina is one of the world's most medicalized and least prevention-oriented countries. There is 1 physician for every 435 people, second only to Italy's doctor-patient ratio. (Canada's ratio is about 1:500.)

Argentina graduates more than 5000 new doctors every year. (Canada, with a population only slightly less than Argentina's, graduates about 1800 new physicians annually, and many claim that number is too high.) Doctors dominate all aspects of health care services in Argentina. In Mendoza's provincial tier-one system, for example, 1400 of the 3000

employees are doctors. "We have a proletarianization of doctors," explains Ferreyra, "where many doctors are doing the work of nurses."

This in itself is not a major financial burden; doctors in the tier-one public system earn only slightly more than nurses. However, most Argentinian doctors "work in all three systems," Ferreyra explains, "beginning the morning in the public hospital, working under contract to an *obras sociales* in the afternoon, and running a private clinic in the evening."

This degree of medicalization has led to two conditions antithetical to the struggle against cholera. "Argentines have come to think of health only in terms of doctors and hospitals," says Ferreyra. "They do not think of prevention. They do not think of self-care. Say you have a hangover — you go to a large hospital the next morning and demand and get immediate, expensive treatment."

Echoing sentiments close to the fiscal hearts of Canadian health ministers, Ferreyra claims there is a strong need for public education on appropriate medical use, and for health care education and health-promotion programs that "don't really exist at all in

our country at this time." But this is where the second condition complicates the first.

Unlike Canada, Argentina has no public health infrastructure. There are no public health units, no public health nurses (although some are now being trained) and no place for public health physicians to go, says Ferreyra, "except into the funding bureaucracy or hospital administration." Even if health care resources were transferred to public health prevention programs, there would be no system to administer them.

This is beginning to change. The establishment of an Argentinian public health association 3 years ago is rekindling physician and other professional interest in the World Health Organization's primary health care strategy, and its more politically charged manifesto, the Ottawa Charter for Health Promotion.

That charter defines health promotion as "the process of enabling people to increase control over . . . health," the "prerequisites" for which include "peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity." South American countries, not surprisingly, are having no less difficulty than Canada in translating such ideals into specific practice.

In Argentina, and in much of the rest of Latin America, cholera has been, and continues to be, a symbol for the tension between health care and public health. "Cholera has a devastating political and community effect," explains Ferreyra. "It was the last cholera pandemic in the late 19th century that caused many of our countries to develop what sanitary systems we now have. But when cholera disappeared, so did the public health momentum. We fell far behind. Perhaps the return of cholera will allow us to complete our work." ■



Sign in memory of fight against yellow fever in San Telmo, Argentina, over a century ago